

WHAT IS CLAIMED

- 1           1.       A method for managing information for an application program, wherein  
2 the information includes an information class having a plurality of attributes values,  
3 wherein the application program maintains multiple information class instances and  
4 wherein each instance includes at least one of the plurality of attribute values,  
5 comprising:  
6           receiving user input indicating a plurality of information class instances and for  
7 each information class instance at least one attribute value;  
8           generating a main directory for the application program;  
9           for each information class instance received from the user, performing:  
10               (i) generating a subdirectory from the main directory for the information  
11 class instance;  
12               (ii) for each received attribute value for the information class instance,  
13 generating one attribute file providing the at least one attribute value; and  
14               (iii) storing each generated attribute file in the subdirectory of the  
15 information class instance for which the attribute value is provided.
- 1           2.       The method of claim 1, further comprising:  
2           receiving a request for information on at least one requested attribute value for the  
3 information class instances; and  
4           in response to the request for information, performing for each information class  
5 instance:  
6               (i) accessing the subdirectory for the information class instance;  
7               (ii) determining whether the accessed subdirectory includes each  
8 requested attribute value in one attribute file in the subdirectory; and  
9               (iii) if the subdirectory includes each requested attribute value in one  
10 attribute file, then returning each requested attribute value from the attribute file.

1           4.       The method of claim 2, wherein the subdirectory does not include one  
2 attribute value if there is no attribute file for the attribute value.

1           6.       The method of claim 5, wherein the form is implemented in a standard  
2 document format capable of being rendered by a viewer program used to render  
3 documents retrieved from over a network.

1           8.       The method of claim 1, wherein at least one attribute file provides the  
2 attribute value by embedding the attribute value in a file name of the attribute file.

1           9.     The method of claim 1, wherein at least one attribute file provides the  
2 attribute value by inserting the attribute value within the attribute file.

1           10.    The method of claim 1, wherein at least one attribute value is comprised  
2 of multiple component values.

1           11.    The method of claim 10, wherein each of the multiple component values is  
2 capable of being comprised of a plurality of multiple sub-component values.

1           12.    The method of claim 1, wherein the information class comprises a first  
2 information class and wherein a second information class is a subclass of the first  
3 information class and has at least one attribute value, wherein there is one instance of the  
4 second information class for each instance of the first information class, further  
5 performing for each instance of the first information class:  
6           generating a subdirectory for the second information class in the subdirectory  
7 generated for the first information class.

1           13.    The method of claim 12, further comprising:  
2           receiving user input for one attribute value for the second information class; and  
3           generating one attribute file for the received user input in the subdirectory for the  
4 second information class, wherein the attribute file provides the received attribute value.

1           14.    The method of claim 12, wherein the attribute value for the second  
2 information class for which the attribute file was generated includes at least one attribute  
3 value from the first information class.

1           15.    The method of claim 1, further comprising:  
2           receiving a request for statistical information on requested attribute values;  
3           for each information class instance, performing:

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4 (i) reading the attribute files for the requested attribute values to generate  
5 information summarizing the attribute values;

6 (ii) and returning the information summarizing the attribute values.

1 16. A method for managing information on a plurality of projects, wherein  
2 each project is capable of having a plurality of attribute values, comprising:

3 receiving user input on a plurality of projects and for each project at least one  
4 attribute value;

5 generating a main directory;

6 for each project for which user input is received, performing:

7 (i) generating a subdirectory from the main directory for the project; and

8 (ii) for each received attribute value, generating one attribute file  
9 providing the at least one attribute value.

1 17. The method of claim 16, wherein the attribute values for each project are  
2 capable of comprising one or more of the following project attribute values: project  
3 comments, a project manager, projected completion date, project purpose, project start  
4 date, project actual completion date, project status, project holidays, and project  
5 interrupts.

1 18. The method of claim 17, wherein the project interrupts attribute value in  
2 the project interrupt file is comprised of multiple interrupt components, wherein each  
3 interrupt component includes subcomponents indicating a type of interrupt, date of  
4 interrupt, duration of interrupt, and interrupt comments.

1 19. The method of claim 16, further comprising:  
2 receiving a request for information on at least one requested attribute value for the  
3 project; and

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21. The method of claim 16, further comprising:  
generating a calendar subdirectory for each project subdirectory, wherein the  
calendar subdirectory includes one calendar file for each day for which calendar  
information is provided for the project.

1           23.     The method of claim 21, wherein the calendar information entered into  
2     one calendar file for one project comprises one attribute value received from the user for  
3     the project that is also entered into one attribute file in the project subdirectory.

24. The method of claim 16, further comprising:  
receiving user input for at least one task for one project;

3           for each task for which user input is received, generating a task subdirectory in  
4   the subdirectory for the project including the task; and  
5           for each received attribute value providing information on the task, generating at  
6   least one attribute file indicating each received attribute value.

1        25.        The method of claim 24, further comprising:  
2        receiving user input for one task indicating a number of subtasks;  
3        receiving user input indicating a percent completion for each subtask of the task;  
4        and  
5        for each received percent completion for one subtask, generating at least one  
6        attribute file indicating the percent completion of the subtask.

26. A system for managing information for an application program, wherein the information includes an information class having a plurality of attributes values, wherein the application program maintains multiple information class instances and wherein each instance includes at least one of the plurality of attribute values, comprising:

- means for receiving user input indicating a plurality of information class instances and for each information class instance at least one attribute value;
- means for generating a main directory for the application program;
- means for performing, for each information class instance received from the user:
  - (i) generating a subdirectory from the main directory for the information class instance;
  - (ii) for each received attribute value for the information class instance, generating one attribute file providing the at least one attribute value; and
  - (iii) storing each generated attribute file in the subdirectory of the information class instance for which the attribute value is provided.

1           27.    The system of claim 26, further comprising:  
2           means for receiving a request for information on at least one requested attribute  
3 value for the information class instances; and  
4           means for performing, in response to the request for information, for each  
5 information class instance:  
6               (i) accessing the subdirectory for the information class instance;  
7               (ii) determining whether the accessed subdirectory includes each  
8 requested attribute value in one attribute file in the subdirectory; and  
9               (iii) if the subdirectory includes each requested attribute value in one  
10 attribute file, then returning each requested attribute value from the attribute file.

1           28.    The system of claim 27, wherein the request for information further  
2 includes a criteria to apply to at least one of the requested attribute values, further  
3 comprising:  
4           means for determining whether the requested attribute value in the attribute file to  
5 which the criteria applies satisfies the criteria, wherein the attribute values for one  
6 information class instance are not returned if the criteria for one attribute value of the  
7 information class instance is not satisfied.

1           29.    The system of claim 27, wherein the means for returning the attribute  
2 value further performs:  
3           generating the requested attribute values into a form, wherein the form includes  
4 information on attribute values in attribute files in multiple subdirectories for information  
5 class instances, and wherein the form is returned.

1           30.    The system of claim 26, wherein the information class comprises a first  
2 information class and wherein a second information class is a subclass of the first  
3 information class and has at least one attribute value, wherein there is one instance of the

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4 second information class for each instance of the first information class, wherein the  
5 means for performing for each instance of the first information class further performs:  
6 generating a subdirectory for the second information class in the subdirectory  
7 generated for the first information class.

1 31. A system for managing information on a plurality of projects, wherein  
2 each project is capable of having a plurality of attribute values, comprising:  
3 means for receiving user input on a plurality of projects and for each project at  
4 least one attribute value;  
5 means for generating a main directory;  
6 means for performing for each project for which user input is received:  
7 (i) generating a subdirectory from the main directory for the project; and  
8 (ii) for each received attribute value, generating one attribute file  
9 providing the at least one attribute value.

1 32. The system of claim 31, wherein the attribute values for each project are  
2 capable of comprising one or more of the following project attribute values: project  
3 comments, a project manager, projected completion date, project purpose, project start  
4 date, project actual completion date, project status, project holidays, and project  
5 interrupts.

1 33. The system of claim 32, wherein the project interrupts attribute value in  
2 the project interrupt file is comprised of multiple interrupt components, wherein each  
3 interrupt component includes subcomponents indicating a type of interrupt, date of  
4 interrupt, duration of interrupt, and interrupt comments.

1 34. The system of claim 31, further comprising:  
2 means for receiving a request for information on at least one requested attribute  
3 value for the project; and

FOOTNOTES



4 means for performing, for each project subdirectory, in response to the request for  
5 information:

- 6 (i) accessing the project subdirectory;  
7 (ii) determining whether the accessed project subdirectory includes each  
8 requested attribute value in one attribute file in the subdirectory;  
9 (iii) if the subdirectory includes each requested attribute value in one  
10 attribute file, then returning each requested attribute value from the attribute file.

1 35. The system of claim 31, further comprising:  
2 means for generating a calendar subdirectory for each project subdirectory,  
3 wherein the calendar subdirectory includes one calendar file for each day for which  
4 calendar information is provided for the project.

1 36. The system of claim 31, further comprising:  
2 means for receiving user input for at least one task for one project;  
3 means for generating, for each task for which user input is received, a task  
4 subdirectory in the subdirectory for the project including the task; and  
5 means for generating, for each received attribute value providing information on  
6 the task, at least one attribute file indicating each received attribute value.

1 37. The system of claim 36, further comprising:  
2 means for receiving user input for one task indicating a number of subtasks;  
3 means for receiving user input indicating a percent completion for each subtask of  
4 the task; and  
5 means for generating, for each received percent completion for one subtask, at  
6 least one attribute file indicating the percent completion of the subtask.

[illegible]

10      for each information class instance received from the user, performing:

13 (ii) for each received attribute value for the information class instance,

15 (iii) storing each generated attribute file in the subdirectory of the

1           39.    The article of manufacture of claim 38, further comprising:

4 in response to the request for information, performing for each information class

6 (i) accessing the subdirectory for the information class instance;

7 (ii) determining whether the accessed subdirectory includes each

8 requested attribute value in one attribute file in the subdirectory; and

9 (iii) if the subdirectory includes each requested attribute value in one

10 attribute file, then returning each requested attribute value from the attribute file.

1           40.    The article of manufacture of claim 39, wherein the request for  
2 information further includes a criteria to apply to at least one of the requested attribute  
3 values, further comprising:  
4           determining whether the requested attribute value in the attribute file to which the  
5 criteria applies satisfies the criteria, wherein the attribute values for one information class  
6 instance are not returned if the criteria for one attribute value of the information class  
7 instance is not satisfied.

1           41.    The article of manufacture of claim 39, wherein the subdirectory does not  
2 include one attribute value if there is no attribute file for the attribute value.

1           42.    The article of manufacture of claim 39, wherein returning the attribute  
2 value further comprises:  
3           generating the requested attribute values into a form, wherein the form includes  
4 information on attribute values in attribute files in multiple subdirectories for information  
5 class instances, and wherein the form is returned.

1           43.    The article of manufacture of claim 42, wherein the form is implemented  
2 in a standard document format capable of being rendered by a viewer program used to  
3 render documents retrieved from over a network.

1           44.    The article of manufacture of claim 43, wherein the form is implemented  
2 as one of a HyperText Markup Language file or Extensible Markup Language (XML) file  
3 and the viewer program comprises an Internet browser program.

1           45.    The article of manufacture of claim 38, wherein at least one attribute file  
2 provides the attribute value by embedding the attribute value in a file name of the  
3 attribute file.

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1           46.     The article of manufacture of claim 38, wherein at least one attribute file  
2 provides the attribute value by inserting the attribute value within the attribute file.

1           47.     The article of manufacture of claim 38, wherein at least one attribute value  
2 is comprised of multiple component values.

1           48.     The article of manufacture of claim 38, wherein each of the multiple  
2 component values is capable of being comprised of a plurality of multiple sub-component  
3 values.

1           49.     The article of manufacture of claim 38, wherein the information class  
2 comprises a first information class and wherein a second information class is a subclass  
3 of the first information class and has at least one attribute value, wherein there is one  
4 instance of the second information class for each instance of the first information class,  
5 further performing for each instance of the first information class:  
6           generating a subdirectory for the second information class in the subdirectory  
7 generated for the first information class.

1           50.     The article of manufacture of claim 49, further comprising:  
2           receiving user input for one attribute value for the second information class; and  
3           generating one attribute file for the received user input in the subdirectory for the  
4 second information class, wherein the attribute file provides the received attribute value.

1           51.     The article of manufacture of claim 49, wherein the attribute value for the  
2 second information class for which the attribute file was generated includes at least one  
3 attribute value from the first information class.

1           52.     The article of manufacture of claim 38, further comprising:  
2           receiving a request for statistical information on requested attribute values;

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for each information class instance, performing:

(i) reading the attribute files for the requested attribute values to generate information summarizing the attribute values;

(ii) and returning the information summarizing the attribute values.

53. An article of manufacture including code for managing information on a plurality of projects, wherein each project is capable of having a plurality of attribute values, wherein the code causes operations to be performed comprising:

receiving user input on a plurality of projects and for each project at least one attribute value;

generating a main directory;

for each project for which user input is received, performing:

(i) generating a subdirectory from the main directory for the project; and

(ii) for each received attribute value, generating one attribute file

providing the at least one attribute value.

54. The article of manufacture of claim 53, wherein the attribute values for each project are capable of comprising one or more of the following project attribute values: project comments, a project manager, projected completion date, project purpose, project start date, project actual completion date, project status, project holidays, and project interrupts.

55. The article of manufacture of claim 54, wherein the project interrupts attribute value in the project interrupt file is comprised of multiple interrupt components, wherein each interrupt component includes subcomponents indicating a type of interrupt, date of interrupt, duration of interrupt, and interrupt comments.

1           56.     The article of manufacture of claim 53, further comprising:  
2           receiving a request for information on at least one requested attribute value for the  
3 project; and  
4           in response to the request for information, performing for each project  
5 subdirectory;  
6                 (i) accessing the project subdirectory;  
7                 (ii) determining whether the accessed project subdirectory includes each  
8 requested attribute value in one attribute file in the subdirectory;  
9                 (iii) if the subdirectory includes each requested attribute value in one  
10 attribute file, then returning each requested attribute value from the attribute file.

1           57.     The article of manufacture of claim 56, wherein the request for  
2 information further includes a criteria to apply to the requested attribute values, wherein  
3 the criteria specifies a status of the project, further comprising:  
4           determining whether the requested attribute value in the attribute file to which the  
5 criteria applies satisfies the criteria, wherein the attribute values for one project  
6 subdirectory are not returned if the criteria for one attribute value is not satisfied.

1           58.     The article of manufacture of claim 53, further comprising:  
2           generating a calendar subdirectory for each project subdirectory, wherein the  
3 calendar subdirectory includes one calendar file for each day for which calendar  
4 information is provided for the project.

1           59.     The article of manufacture of claim 58, wherein the calendar information  
2 for one day and one project is entered by a user.

1           60.     The article of manufacture of claim 58, wherein the calendar information  
2 entered into one calendar file for one project comprises one attribute value received from

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63. A computer readable medium including information for an application program, wherein the information includes an information class having a plurality of attributes values, wherein the application program maintains multiple information class instances and wherein each instance includes at least one of the plurality of attribute values, comprising:

- a main file directory for the application program;
- one subdirectory from the main directory for each information class instance; and
- one attribute file for each attribute value for each information class instance,

wherein each attribute file provides one attribute value and is in the subdirectory of the information class instance for which the attribute value is provided.

[illegible][illegible][illegible]

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1           70.     The computer readable medium of claim 57, further comprising:  
2           a task subdirectory in the subdirectory for the project including each task for  
3     which user input is received; and  
4           one attribute file indicating a received attribute value for each received attribute  
5     value providing information on the task.

Year	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	